



Puzzles and Games to Solve Problems

- Try solving various puzzles such as Sudoku, picture puzzles, and brain teasers.
- Play tic-tac-toe in reverse so the winner will be the one who forces the other player to get three “Xs” or three “Os” in a row, column or diagonal.
- Keep a board game set up to encourage family members to continue to play together which also enhances cooperation and communication skills.

Graph Complex Information

- Use a bar graph to show the favorite ice cream flavor of family members. Extend the graph to include neighbors or relatives.
- Make a pie chart or circle graph showing how much time your child spends eating, in school, playing or doing chores. This also requires estimation.

Sources: The National PTA, edited and Nebraska Department of Education.

To learn what your child is expected to know and do in mathematics, visit the website for Nebraska academic content standards for mathematics at:

<http://www.education.ne.gov/math>

For more information please contact the
Director of Mathematics Education,
Deborah Romanek,
at deb.romanek@nebraska.gov or 402.471.2503.

Math Resources

U.S. Department of Education

Helping Your Child Publication series – *Booklets and brochures with helpful tools for parents.*

<http://www2.ed.gov/parents/academic/help/hyc.html>

National Science Foundation and the U.S. Department of Education

Figure This – *Demonstrates challenging middle school mathematics and emphasizes the importance of high-quality math education for all students.*

<http://www.figurethis.org/index.html>

National Council of Teachers of Mathematics (NCTM)

Family Guide: Fostering Your Child's Success in Mathematics – *Free guide available to print.*

<http://illuminations.nctm.org/NCTMResources.aspx>

Illustrations – *Another guide with home and classroom activities, lessons, interactive tools, and web resources for students to explore, learn and apply mathematics.*

<http://illuminations.nctm.org/Default.aspx>

Family Education

School Resources for Parents – *Find homework help and skill-building tips in every subject.*

<http://school.familyeducation.com/>



Helping your child learn math

Math Tips for Parents



Tips, activities and resources to help your child learn mathematics.

Provided by:

Nebraska State Board of Education

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Lincoln, NE 68509

Phone: 402-471-2295
www.education.ne.gov

November 2010

Tips for Parents

Build Your Child's Success in Math.

1. **Be Positive.** Let your children know that you think everyone can be successful in math. They will believe it too.
2. **Play family games** that use math and are lots of fun. Card games like “Go Fish” and “Gin Rummy” teach counting, sorting and strategy.
3. **Avoid stereotypes** that set limits on what any child can be or do. Women can be engineers and children of all races, ethnicities and gender can excel in advanced math.
4. **Choose gifts that develop problem solving skills**, such as puzzles and Monopoly.
5. **Expand your children's horizons.** Your children may want to be doctors, nurses, firefighters, weather forecasters, astronomers, airline pilots or forest rangers. Inadequate preparation in math can limit children's career choices.
6. **Buy or borrow library books** that use math such as counting books or books on shapes and colors are just as important as alphabet books.
7. **Connect math learning to the real world.** Talk to your child about using math when you follow a recipe, go to the bank, check the temperature or decide if a sale price is a good value.
8. **Visit museums, libraries and community centers** often to see what materials and resources are available. Notice what interests your child.

9. **Talk with teachers and other school staff.** Learn more about your child's studies and ask what you can do to help reinforce math skills.

10. **Encourage your children to solve problems.** Ask questions, but let them figure it out. Learning how to find answers is a lifetime skill.

Source: The National PTA, edited.

Activities for Elementary School Students

Counting or Measuring

- Assign money values to the letters of the alphabet (A = 1 cent, B = 2 cents) and see which family member has a name with the highest value. Try to find a word with the highest value like supercalifragilisticexpialidocious.
- Using a mileage guide, a map and a magic marker, let your child follow the route you take and check how far you have gone and how much farther you must go to reach your destination.
- Bake a batch of cookies and let the children measure ingredients, including fractional parts. Ask a child to double the recipe.



Understanding Shapes and Patterns

- Ask a child to tape colored circles on other circles in the house like doorknobs, plates.
- On a walk or ride through the neighborhood, help find interesting shapes such as a building with a dome or golden arches.
- “Walking a tightrope” to learn shapes. Put a long string on the floor with different shapes placed on the string and let the child identify the shapes as they walk on the string. Ask children to create their own shape and give it a name. Talk about how naming things helps us know them.

Sorting

Help children notice things that are alike and sort them out of mixed items or groups.

- In a jar or glass filled with various buttons or beans, ask your child to “put things together that go together” and explain color, size and purpose.
- On a walk outdoors, ask your child to look for different kinds of vehicles and to list them. Then see how many they can find in one group, like trucks that are dump trucks, delivery trucks, etc.
- Let children help sort laundry by putting socks in one pile, pants or blouses in another, then regroup by family member.
- Look through a catalogue for pictures of items that can be grouped together. For example, things that grow or will not grow or things that go inside or outside the house.

Finding Reasonable Estimates

Finding reasonable estimates helps children avoid totally unreasonable answers.

- Pennies are fun to collect. What would happen if we couldn't use them anymore? As you pick items off the grocery shelf, have your child “round-off” prices to the nearest 5 cents.
- Let a child help make a grocery list for a favorite meal and, using the newspaper ads, estimate how much it will cost to buy the ingredients.
- Ask questions that require some thought but don't require paper and pencil. “Will it take longer to clean your room or take a bath? Which three things in the house are the same lengths as this shoe string?”